



## CONTEST SCOPE

**Contest Chair**

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| <b>Contest:</b>  | Welding Fabrication  |
| <b>Purpose:</b>  | To evaluate each contestant's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of welding. |
| <b>Clothing:</b> | Standard SkillsUSA attire for the fabrication team.  |

### Equipment and Material:

**Equipment/Tools:** Based on sending school district equipment. All welds will be completed with GTAW or GMAW and all cuts will be completed with PAC or OFC as identified by the blueprint. Blueprint will be provided directly to schools on December 1st 2023.

**Materials:**

- 2 ½" Carbon Steel Schedule 40 Pipe – 1'
- 2" Carbon Steel Schedule 40 Pipe – 8'
- ½" Carbon Steel plate – 2' x 2'
- ¼" Carbon Steel plate – 3' x 3'
- ½" Carbon Steel round stock – 18"
- ¾ -10 UNC Hex Head Nut – 6 pieces
- ¾ -10 UNC Hex Head Cap Screw – 6 pieces

# Scope of Contest

Students (team of three) will demonstrate the utilization of several different welding/cutting processes to complete the project within a given time frame. Each team will submit one binder with required documentation of the project. Students will have a question-and-answer session with the judges that are evaluating the contest.

## Knowledge Performance:

The contest will include a multiple-choice written knowledge exam on welding and blueprint reading. This exam will be taken as a team.

## Skill Performance:

This is not only a project based on welding ability and skill, but also time management and background knowledge associated with the content area.

## Contest Guidelines:

As per the most recent publication of the SkillsUSA Technical Standards Handbook.

# Binder Requirements:

Tabs in the binder need to be divided into the following sections. One binder per team.

## Tab 1: Criteria and Projects:

- Scope
- Provided project blueprint

## Tab 2: Contestant Documentation:

- Team Member 1:
  - Photo documentation:
    - Photo documentation of Contestant 1 in process of laying out pieces prior to cutting.
    - Photo documentation of Contestant 1 performing a cutting process on the project.
    - Photo documentation of Contestant 1 performing a welding process on the project.
    - Photo documentation of Contestant 1 performing finishing of the project.
  - Team Member 1 Essays (type one paragraph for each question):
    - Describe how you contributed to this project.
    - Explain what you struggled with during this project.
- Team Member 2:
  - Photo documentation:
    - Photo documentation of Contestant 2 in process of laying out pieces prior to cutting.
    - Photo documentation of Contestant 2 performing a cutting process on the project.
    - Photo documentation of Contestant 2 performing a welding process on the project.

- Photo documentation of Contestant 2 performing finishing of the project.
- Team Member 1 Essays (type one paragraph for each question):
  - Describe how you contributed to this project.
  - Explain what you struggled with during this project.
- Team Member 3:
  - Photo documentation:
    - Photo documentation of Contestant 3 in process of laying out pieces prior to cutting.
    - Photo documentation of Contestant 3 performing a cutting process on the project.
    - Photo documentation of Contestant 3 performing a welding process on the project.
    - Photo documentation of Contestant 3 performing finishing of the project.
  - Team Member 1 Essays (type one paragraph for each question):
    - Describe how you contributed to this project.
    - Explain what you struggled with during this project.

Tab 3: Team Essays:

Typed explanation of the following questions. One paragraph per question.

1. How did you work together and utilize each other's strengths and weaknesses?
2. Did your team communicate effectively? Explain why or why not.
3. What advice would you give someone entering this competition next year?
4. Identify and explain something each member learned and will take away from this competition.

